

Factors Influencing Gen-Z's Intention to Buy Green Cosmetics in Ho Chi Minh City, Vietnam

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Abstract— Doing business in big cities is always considered the top concern of business owners. Assessing customer concerns is a requirement. Especially for young customers. This study focuses on identifying and analyzing the influencing factors of Generation Z's intention to purchase green cosmetics in Ho Chi Minh City. The results indicate that four important factors are eco-label and brand certification, perception of behavioral control, perceived effectiveness, and subjective norms. Furthermore, the study offers practical recommendations to enhance these factors and educate the Gen Z community and businesses in Ho Chi Minh City about green cosmetics.

Keywords— Generation Z, Green cosmetics, Eco-label, Consumer Behavior.

I. INTRODUCTION

From 2020, the skincare and beauty sector must reinvent itself to quickly respond to new market needs. The most important challenge is finding a balance between "nature" and "chemistry of cosmetics" (Dini & Laneri, 2021). According to Dini and Laneri, a cosmetic can be considered "green" if its formula contains active ingredients derived from nature, such as minerals and botanicals, and not active ingredients. similarity is chemically reproduced in the laboratory. It is better if it is produced in an ecologically sustainable way through processing methods that are safe for the environment (Dini & Laneri, 2021). Since then, a series of green cosmetic brands have been born to attract young people.

Realizing the great impact of green cosmetics on consumers is Gen Z. The study examines the significance of green cosmetic purchase intention among the Gen Z demographic and highlights its importance for the cosmetic industry. Simultaneously, it is proposed measures contribute to solving the problem of harmful cosmetics to help young generation Z use cosmetics of clear origin with benign ingredients from nature and effective. effective use while protecting health and the environment. At the same time, from the reflections of Gen Z youth in Ho Chi Minh City, we make appropriate recommendations to bring about efficiency in the business of green cosmetics in a sustainable way. Therefore, our group decided to choose the topic "Factors affecting the intention to buy green cosmetics of Gen Z in Ho Chi Minh City".

Helps to identify the factors affecting the intention to buy green cosmetics of Generation Z in Ho Chi Minh City. Propose several recommendations and solutions to contribute to improving the community's knowledge about green cosmetics, to encourage the choice and use of green cosmetics in the Gen Z community and in the consumer community shared.

II. LITERATURE REVIEW

Consumers of green cosmetics define the term as cosmetics made from natural ingredients that not only benefit their personal use but also contribute to the protection of the environment. These consumers are motivated to purchase green cosmetics not just for their own benefit but also with the intention of safeguarding the surrounding environment (Lin et al., 2018). Green cosmetics are also

defined as cosmetic products that are multifaceted, aiming to protect the environment, reduce pollution, use resources responsibly, and care about the welfare and conservation of natural resources. biological species (McEachern & McClean, 2002). Green cosmetics are defined as products that are environmentally friendly and do not cause pollution or depletion of natural resources. These cosmetics are also designed to be recyclable, further promoting sustainability. (Shamdasani et al., 1993). Research has shown that green cosmetics often include natural products with plant-based ingredients and fruit-based formulations (Csorba & Boglea, 2011). The concept of green cosmetics is evolving to include products that actively support sustainability. A notable example is the introduction of the Organic and Natural Cosmetics Standard (COSMOS) by the European Union in 2008. This standard sets guidelines and criteria for certifying cosmetics as organic and natural, further promoting environmentally friendly practices in the industry. (D'Amico, 2008) in response to this trend.

Gen Z, also known as generation, post-Millennials, or Zoomers, is a group of people born between the 1990s and 2010s (Pew Research Center, 2021). The current generation is the first to experience childhood and adolescence in the digital age, having had access to technology and the internet from an early stage of their lives. As a result, they are renowned for their ability to use technology and interact with it for personal and professional purposes. Gen Z is entering adulthood and the workforce in a time of significant social and economic change, including automation, globalization, and changing economics. They are known for their entrepreneurial spirit, desire for work-life balance, and emphasis on personal growth. Overall, Gen Z is a diverse, digitally savvy, and socially conscious generation that is shaping the future through their values and behaviors (PewResearchCenter,2021). Furthermore, Eixarch et al. (2019) highlight that Gen Z consumers exhibit a higher level of environmental awareness compared to other generations.

According to Kotler (2011), The consumer buying process is typically structured into five stages: need awareness, information search, evaluation of alternatives, purchase intention, and post-action behavior. These stages outline the steps individuals go through when making a purchase decision.

The consumer buying process commences with need perception, where individuals become aware of a problem or need, which can be influenced by internal or external factors (Kotler, 2011).

Next, the consumer engages in an information search to gather relevant information about a product or service that can fulfill their need. The extent of information sought is influenced by their motivation. Sources of information can include family, friends, or marketing channels.

During the stage of evaluating options, consumers assess their purchasing choices based on personal preferences and the specific buying context. This evaluation process can vary significantly, ranging from thorough and careful consideration to more impulsive or minimal judgment. Some consumers make decisions independently, while others seek input or involve others in the decision-making process.

Buying decision: During the evaluation phase, consumers rate brands and make purchase intentions. Two factors that can influence purchasing decisions include other people's attitudes and contingencies, such as an economic downturn.

After making a purchase, consumers may exhibit post-purchase behavior which can include feelings of satisfaction or dissatisfaction. This behavior may further influence their future actions such as repurchasing the product and actively recommending it to others (Kotler, 2011).

Purchase intention is an important stage that precedes actual consumption behavior. Therefore, the factors that impact consumption behavior also affect purchase intention. This forms the foundation for identifying the factors that influence purchase intention, drawing upon previous studies on consumer behavior as a theoretical basis.

Through the previous research papers and based on the summary table to evaluate the criteria given in the research articles, especially based on Nguyen's original research (2020), the authors found that evaluating eco-labels and brand certifications, assessing the perceived effectiveness of products, considering perceived behavioral control, and subjective standards are all elements that influence

consumers' intention to purchase cosmetics with environmentally friendly attributes. Considering these factors, a research model can be devised to examine the key aspects influencing the intention to buy green cosmetics among Generation Z in Ho Chi Minh City.

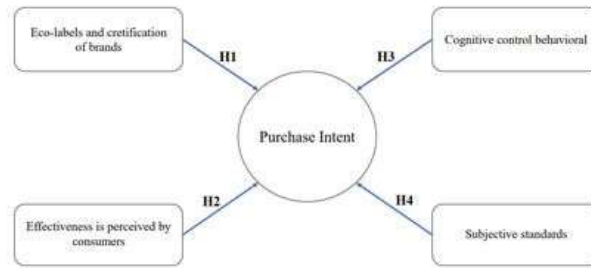


Figure 2.1. Model of elements influencing Gen Z's decision to purchase eco-friendly cosmetics.

III. RAW MATERIAL AND METHODOLOGY

Using the theories of the elements influencing Gen Z's propensity to purchase green cosmetics and the research methods given in Chapter 1, the authors will present the research process and design research model. official surplus. Along with that is the presentation of the method of collecting and processing the collected data and the scales in accordance with the stated research objectives. To complete the process of analyzing and evaluating the research topic, the team followed a 13-step research process as follows:

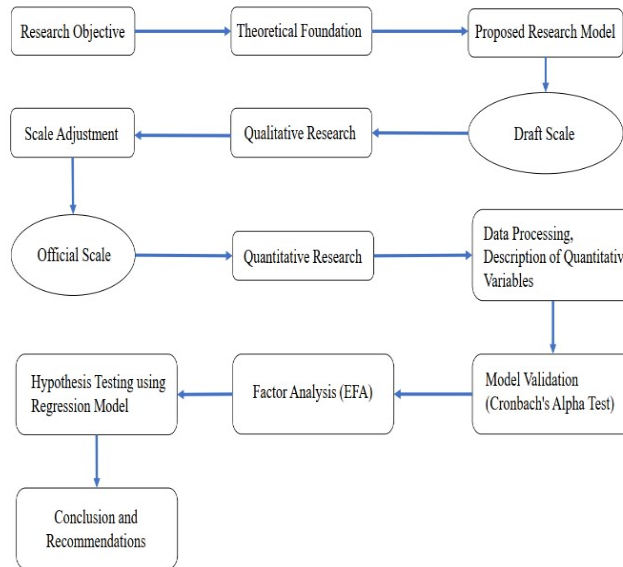


Figure 3.1. Research process

Building a scale

Inheriting from Nguyen's research (2020), the authors provide a draft scale that includes 4 variables influencing Generation Z's decision to choose eco-friendly cosmetics include: eco-labels and certification of brands, nature performance perceived by consumers, perceived behavioral control, and subjective norm.

Variable code	Interpretation	Source
Eco-labels and certification of brands		
NST1	The presence of an authenticity label on the product packaging instills a sense of trust, which is why I personally prefer green cosmetics.	Kapoor et al (2019)

NST2	Considering how affordable green cosmetics are, I prefer them.	
NST3	Due to the information supplied by the campaigns, I favor green cosmetics.	
NST4	Because government restrictions on product safety are so trustworthy, I like green cosmetics.	
NST5	Advertising demonstrates the usefulness of the products, I favor green cosmetics.	
NST6	I think the product information is highly safe, so I choose green cosmetics.	
Effectiveness is perceived by consumers		
CN1	I believe that by purchasing green cosmetics, I may contribute to the solution of the resource crisis.	Nguyen (2020)
CN2	I can contribute to solving environmental problems by choosing my own cosmetics.	
CN3	I care about the environment	
CN4	As a consumer, what I buy affects the nation's environmental problems.	
Cognitive control behavioral		
HV1	I've discovered that I can change how I act to suit the demands of any circumstance.	Lennox and Wolfe (1984)
HV2	I can alter my behavior in certain social circumstances if I feel the need to.	
HV3	Knowing what the scenario requires makes it simple for me to modify my behavior.	
HV4	Depending on the impact I want to have on people, I can modify how I conduct around them.	
Subjective standards		
CCQ1	Personal norms and values influence my intention to buy green cosmetics.	Nguyen (2020)

CCQ2	Environmental values affect my intention to buy green cosmetics.	
CCQ3	The decision to purchase green cosmetics is influenced by environmental considerations.	
CCQ4	Friend and family recommendations have an impact on my decision to purchase eco-friendly cosmetics.	

Purchase Intent		
YD1	If I must select between two cosmetics that are equally effective, I will choose the one that is least hazardous to the environment and other people.	Nguyen (2020)
YD2	I changed cosmetics for ecological reasons.	
YD3	I especially prefer to buy cosmetic products from companies that try to protect the environment.	

Table 3.1. Questionnaire surveying factors affecting Gen Z's decision to buy green cosmetics in Ho Chi Minh City

Check the reliability of the scale (Verify the accuracy of the scale.)

To assess the reliability of the scales, the authors employ Cronbach's Alpha, which assists in testing the consistency of the scale. This helps identify and eliminate any unsatisfactory observed variables, as well as potentially misleading variables that may influence latent variables and factors. Fake and affect the relationships of the research model. The minimum Cronbach's Alpha selection requirement is 0.6, consider observed variables to be reliable if their total variable correlation coefficient is equal to or greater than 0.3.

Exploratory factor analysis (EFA)

To eliminate any unsatisfactory variables, the authors initially tested the scale using Cronbach's Alpha reliability coefficient. After this step, they proceed to further test the scale using exploratory factor analysis (EFA). Factor analysis is a set of procedures used to summarize and understand data.

The authors also employ Bartlett's test of sphericity, which determines whether the observed variables within a factor are correlated or not. If the significance value (<) of Bartlett's test is less than 0.05, it indicates that the observed variables are correlated with each other within the factor. Explained total variance, which shows the overall percentage of measurement variables for which the extracted factors are explained. To evaluate the effect of factor extraction, using a total variance explained that $\geq 50\%$ is acceptable and $\geq 60\%$ is good.

Pearson's correlation method

The Pearson correlation coefficient (r) is a statistical measure used to assess the relationship or association between continuous and dependent variables. It is also a requirement for conducting multiple regression analyses.

The value of r ranges from -1.0 to 1.0. If the calculated value exceeds 1.0 or falls below -1, it suggests an error in the correlation measurement. A negative R-value indicates an inverse relationship or negative correlation between the two variables (with an absolute inverse when the value is -1), while a positive R-value indicates a covariant relationship or positive correlation (with an absolute covariance when the value is equal to 1). If the r value is 0, the two variables are said to be independent of each other.

The Pearson test's Sig. value is used to test the H0 hypothesis: the correlation coefficient is zero. If the Sig. value is less than 5%, it can be concluded that the two variables are correlated. The

relationship between variables will be tighter the larger the R-value. If the significance value (Sig.) is greater than 5%, it indicates that there is no statistically significant correlation between the two variables.

Build regression model.

The authors used the multiplicity regression method to estimate the impact of 4 scale components: (1) Eco-labeling and certification of brands, (2) Cognitive control behavior, (3) Effectiveness perceived by consumers, (4) Subjective standards. The normalized regression model takes the form: The form of the normalized regression model is:

$$YD = \beta_1 * NST + \beta_2 * CN + \beta_3 * HV + \beta_4 * CCQ$$

Check the reliability of the scale.

Cronbach's Alpha coefficient is a statistical measure that quantifies the extent of correlation among the variables in a questionnaire. It is commonly used to assess the internal consistency and reliability of a scale by calculating the interrelatedness of each variable and its correlations.

Typically, a minimum requirement of 0.6 is set for Cronbach's Alpha to ensure acceptable reliability. Additionally, it is essential to consider that observed variables should have a total variable correlation coefficient of at least 0.3. This criterion helps guarantee a reliable and consistent measurement of the underlying construct.

IV. RESULT AND DISCUSSION

Observation variables	Typical scale if a variable	Variance on a scale if a variable	Total correlation between all variables	if a variable, Cronbach's alpha
"Eco-labels and certification of brands " scale: Cronbach's Alpha = 0.884				
NST1	17,3148	19,956	0,744	0,856
NST2	17,5123	21,270	0,632	0,874
NST3	17,4815	21,133	0,637	0,874
NST4	17,4012	20,043	0,716	0,861
NST5	17,4815	20,363	0,721	0,860
NST6	17,4691	0,474	0,727	0,859
"Efficiency is perceived by consumers" scale: Cronbach's Alpha = 0.848				
CN1	7,0494	4,345	0,684	0,820
CN3	7,1173	4,365	0,741	0,767
CN4	7,1420	4,160	0,727	0,779
"Cognitive Control Behavior" Scale: Cronbach's Alpha = 0.840				
HV1	6,9877	4,124	0,750	0,730
HV3	7,0494	4,557	0,669	0,810
HV4	6,9136	4,489	0,693	0,788
"Subjective standard" scale: Cronbach's Alpha = 0.834				
CCQ1	7,2222	3,950	0,748	0,714
CCQ3	7,3025	5,007	0,627	0,833
CCQ4	7,3395	4,213	0,717	0,746

Table 3.2. Cronbach's alpha coefficient of the scale of variables influencing Generation Z's intention to purchase green cosmetics.

Observation variables	Average scale if the variable type	Scale variance if the variable type	Total variable correlation	Cronbach's alpha if variable type
"Purchase Intent" scale: Cronbach's Alpha = 0.814				
YD1	7,0432	4,302	0,669	0,741
YD2	7,3025	4,684	0,623	0,786
YD3	7,1975	4,197	0,705	0,702

Table 3.3. Scale for measuring purchasing intention based on Cronbach's Alpha
Exploratory factor analysis (EFA)

The purchase intention scale includes 3 observed variables, YD1, YD2, and YD3 (dependent variable). Variables with reliability Cronbach's alpha continued to be included in exploratory factor analysis (EFA).

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0,707	
Bartlett's Test of Sphericity	Approx. Chi-Square	165,740
	df	3
	Sig.	0,000

Table 3.4. “KMO and Bartlett's” test for the scales of the dependent variable
Pearson's correlation method

The Pearson correlation coefficient (r) is indeed a statistical measure used to quantify the association or relationship between continuous variables and dependent variables. This is also one of the conditions for multiplicity regression analysis. The H0 hypothesis is tested using the Sig. value of the Pearson test, where the correlation coefficient is zero. If the Sig. value is less than 5%, it can be concluded that the two variables are correlated. The relationship between variables will be tighter the larger the r-value. There is no link between the two variables if the Sig. value is higher than 5%.

To conduct a multiple linear regression analysis, the linear correlations between the independent variables and the dependent variable should be considered initially. The condition for being able to use the regression method is that the purchasing intent dependent variable (YD) and the independent variables need to be correlated.

Correlations					
	YD	NST	CN	HV	CCQ

YD	Pearson Correlation	1	0,626**	0,554**	0,547**	0,652**
	Sig. (2-tailed)		0,000	0,000	0,000	0,000
	N	162	162	162	162	162
NST	Pearson Correlation	0,626**	1	0,444**	0,409**	0,517**
	Sig. (2-tailed)	0,000		0,000	0,000	0,000
	N	162	162	162	162	162
CN	Pearson Correlation	0,554**	0,444**	1	0,352**	0,416**
	Sig. (2-tailed)	0,000	0,000		0,000	0,000
	N	162	162	162	162	162
HV	Pearson Correlation	0,547**	0,409**	0,352**	1	0,526**
	Sig. (2-tailed)	0,000	0,000	0,000		0,000
	N	162	162	162	162	162
CCQ	Pearson Correlation	0,652**	0,517**	0,416**	0,526**	1
	Sig. (2-tailed)	0,000	0,000	0,000	0,000	
	N	162	162	162	162	162

Table 3.5. Correlation matrix between factors

Check the fit of the model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0,782 ^a	0,612	0,602	0,63231	0,612	61,945	4	157	0,000	2,110

Table 3.6. Summary model

Anova Accreditation

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	99,067	4	24,767	61,945	0,000 ^b
	Residual	62,772	157	0,400		

Total	161,839	161		
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Table 3.7.Result ANOVA

Build regression model

The authors used the multiplicity regression method to estimate the impact of 4 scale components: (1) Eco-labeling and certification of brands, (2) Cognitive control behavior, (3) Effectiveness perceived by consumers, (4) Subjective standards. The normalized regression model takes the form: The normalized regression model has the form:

$$YD = \beta_1 * NST + \beta_2 * CN + \beta_3 * HV + \beta_4 * CCQ$$

Content	Non-standardized Beta	Standardized Beta	Sig.	Conclude
H1: Eco-labels and certifications of brands that influence the intention to buy green cosmetics in Ho Chi Minh City	0,322	0,287	0,000	Have an impact
H2: Behavioral control awareness affects Gen Z's intention to buy green cosmetics in Ho Chi Minh City	0,184	0,185	0,002	Have an impact
H3: The effectiveness perceived by consumers has an impact on gen Z's intention to buy green cosmetics in Ho Chi Minh City	0,234	0,233	0,000	Have an impact
H4: Subjective standards affect gen Z's intention to buy green cosmetics in Ho Chi Minh City	0,308	0,309	0,000	Have an impact

Table 3.8.Regression results

Discussion about "**Subjectivestandards**": Through regression analysis, "Subjective standards" have the greatest impact on Gen Z's intention to buy green cosmetics in HCM (Standardized beta = 0.309). This shows that Gen Z evaluates and makes an intention to buy green cosmetics based on their own personal standards and values, which reflect care and respect for their personal values such as ethics, health, experience, and compatibility with individual needs.

Discussing "**Eco-labels and certification of brands**": Through regression analysis, "Eco-labels and certification of brands" have the second largest impact on Gen Z green cosmetic purchase intention in HCM City (Standardized Beta = 0.287). According to the findings of the EFA factor analysis, this factor significantly affects Gen Z consumers' intentions to purchase eco-friendly cosmetics in Ho Chi Minh City. A product with an eco-label and brand certification will help them feel secure about the safety, quality, and sustainability of green cosmetics.

Discuss “**Efficiency is perceived by consumers**”. Through regression analysis, it was found that “Efficiency is perceived by consumers” has the third largest impact on the intention to buy green cosmetics of Gen Z in HCM City (Standardized beta = 0.233). This shows that Gen Z is paying special attention to the environment and protecting natural resources by choosing green cosmetics. They feel that they can contribute to increasing their ability to solve environmental problems through green shopping.

Discuss “**Cognitive Control Behavior**”. Through regression analysis, it shows that “Cognitive Control Behavior” has the least impact on the intention to buy green cosmetics of Gen Z in HCM City (Standardized beta = 0.184). The subjects said that they themselves have the ability can alter their behaviour to suit various social contexts, such as taking into account their financial capacity, and needs at that time, that affect their purchase intention. However, other factors need to be reassessed to adjust the behavior accordingly.

V. CONCLUSION

The authors' research objective is to identify the variables influencing Generation Z's inclination to purchase green cosmetics in HCM. From there, propose some ideas and management solutions to contribute to improving the community's knowledge about green cosmetics, thereby encouraging the choice and use of green cosmetics in the Gen Z community and also in the community consumer community.

The study commences by reviewing existing theories and prior research findings regarding the factors influencing Gen Z's intention to purchase eco-friendly cosmetics. Based on this background, the study puts forward a theoretical model to examine the determinants of Gen Z's intention to buy green cosmetics in Ho Chi Minh City, including 4 factors (independent variables) "Eco-labels and certification of brands", "Cognitive Control Behavior", "Efficiency is perceived by consumers", "Subjective standard" with 18 observed variables and one factor (dependent variable) is "purchase intention" with 3 observed variables. Before carrying out the quantitative research, the authors conducted qualitative research conducted through in-depth interview techniques to consider modifying, adjusting, and adding observed variables to the scales (if any).

The official research process was conducted by the authors through qualitative research to complete the scale and collect information related to the research object to serve the quantitative research through in-depth group interviews. through a detailed questionnaire. The number of samples collected is 162 people aged 15 to 25 years old, belonging to Gen Z and living in HCMC. SPSS 20 will be used to process the data that was collected. After the research eliminated the three observed variables CN2, HV2, and CCQ2 after analyzing the reliability coefficient of the scale using Cronbach's Alpha because the method The needed condition is not met if the correlation coefficient of the whole variable is less than 0.3. Analyzing EFA factors will be used to test the remaining observed variable in the future, and the original study model will be modified according to the analysis's findings. The adequacy of the research model was then tested by using the variables from the adjusted research model in the linear regression analysis.

The results of analysis and testing show that among the factors affecting Gen Z's intention to buy green cosmetics in Ho Chi Minh City, the most influential factor is "Subjective standard" (Standardized Beta = 0.309).). Next is the factor “Eco-labels and certification of brands” (Standardized Beta = 0.287), the factor “Efficiency is perceived by consumers” (Standardized Beta = 0.233), and finally the factor of “Cognitive Control Behavior” factor (normalized beta = 0.184).

References

- [1] Acharya, S., Bali, S., Bhatia, B.S. (2021). Exploring Consumer Behavior towards Sustainability of Green Cosmetics. In ICAECT (International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies).
- [2] KAjzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211
- [3] Al-Haddad, S., Awad, A., Albate, D., Almashhadani, I., & Dirani, W. (2020). FACTORS

- AFFECTING GREEN COSMETICS PURCHASE INTENTION. *Journal of Management Information & Decision Sciences*, 23(4), 201-211.
- [4] Amberg, N., Fogarassy, C. (2019). Green Consumer Behavior in the Cosmetics Market. *Szent Istvan University, Pater Karoly*, 8 (3), 1-19.
- [5] Askadilla W.L., Krisjanti M.N. (2017). Understanding Indonesian Green Consumer Behavior On Cosmetic Products: Theory of Planned Behavior Model. *Polish Journal of Management Studies*, 15 (2), 7-15.
- [6] Averill, J. R. (1973). Personal control over aversive stimuli and its relationship to stress. *Psychological Bulletin*, 80(4), 286-303.
- [7] Chhetri, S., Fernandes, S., Baby, S. (2021). Validating purchase intention for green cosmetic products: Applying and extending theory of planned behavior. *IT in Industry*, 9(1), 773-85.
- [8] Cotte J., Coulter R. A., & Moore M. (2005). Enhancing or disrupting guilt: The role of credibility and perceived manipulative intent. *Journal of Business Research*, 58, 3, 361-368
- [9] Csorba, Lúcia Magdalena, and Vanina Adoriana Boglea. (2011). Sustainable cosmetics: A major instrument in protecting the consumer's interest. *Regional and Business Studies*, 3, 167–76.
- [10] Daud, F. N. M., & Hee, O. C. (2021). The Mediating Role of Brand Love in Predicting Green Purchase Behavior of Organic Cosmetic Products. *International Journal of Academic Research in Business and Social Sciences*, 11(6), 669–676.
- [11] Daud, F. N. M., & Hee, O. C. (2021). The Mediating Role of Brand Love in Predicting Green Purchase Behavior of Organic Cosmetic Products. *International Journal of Academic Research in Business and Social Sciences*, 11(6), 669–676.
- [12] Eixarch, H., Wyness, L., & Siband, M. (2019). The Regulation of Personalized Cosmetics in the EU. *Cosmetics*, 6, 2, 29.
- [13] Ellen, P. S., Wiener, J. L., & Cobb-Walgren, C. (1991). The role of perceived consumer effectiveness in motivating environmentally conscious behaviors. *Journal of Public Policy & Marketing*, 102 - 117.
- [14] Firstinsight (2020). the state of consumer spending: gen z shoppers demand sustainable retail. Truy cập tại: <https://www.firstinsight.com/white-papers-posts/gen-z-shoppers-demand-sustainability>
- [15] Gallastegui, G. I. (2002). The use of eco-labels: a review of the literature. *Eur. Env.*, 12, 316–331
- [16] Kaiser, H. F. (1970). A second generation little jiffy. *Psychometrika*, 35(4), 401-415.
- [17] Kapoor, R., Singh, A.B., Misra, R. (2019). Green Cosmetics - Changing Young Consumer Preference and Reforming Cosmetic Industry. *International Journal of Recent Technology and Engineering*, 8 (4), 12932-39.
- [18] Khan, S., Salim, A. (2019). Saudi females' buying behavior of green cosmetics: A pertinent motivational aspect. *Journal of Marketing Communications*, 27 (6), 594-606.
- [19] Kim Y., & Choi S. M. 2005. Antecedents of green purchase behavior: An examination of collectivism, environmental concern, and PCE. *Advances in Consumer Research*, 32, 1, 592-599.
- [20] Kinnear, T., James R. T., & Sadrudin A. 1974. Ecologically concerned consumers: Who are they? *Journal of Marketing*, 38, 2, 20-24.
- [21] Kurina, S.N., Mayangsari, L. (2020). Barriers in Purchasing Green Cosmetic Products Among Indonesian Women. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 5(8), 72-84.
- [22] Lennox, R. D., & Wolfe, R. N. (1984). Revision of the Self-Monitoring Scale. *Journal of Personality and Social Psychology*, 47(3), 516.
- [23] McEachern, Morven G., and Paulin McClean. (2002). Organic purchasing motivations and attitudes: Are they ethical? *International Journal of Consumer Studies*, 26, 85–92.
- [24] Meyer, R. E., & Olkin, I. (1985). Statistical estimation in factor analysis. In *Handbook of statistics* (Vol. 4, pp. 321-347). Elsevier Science Publishers.
- [25] Nguyen, N.M.D. (2020). Factors influencing finish generation z consumer behaviors towards green purchase of cosmetics. PhD thesis. Vaasan Ammattikorkeakoulu University.

- [26] Nittala, R. (2014). Green consumer behavior of the educated segment in India. *Journal of international consumer marketing*, 26(2), 138-152.
- [27] Pew Research Center. (2021). Defining generations: Where Millennials end and Generation Z begins. Truy cập tại: <https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/>
- [28] Pituch, K. A., & Stevens, J. P. (2016). *Applied multivariate statistics for the social sciences: Analyses with SAS and IBM's SPSS*. Routledge.
- [29] Pop, R.A., Săplăcan, Z., Alt, M.A. (2020). Social Media Goes Green—The Impact of Social Media on Green Cosmetics Purchase Motivation and Intention. *information*, 11(9),1-16.
- [30] Putri, N.W.A, Wahyuni, N.M., Yasa, P.N.S. (2021). The Effect of Attitude in Mediating Environmental Knowledge towards the Purchase Intention of Green Cosmetic Product. *Jurnal Ekonomi dan Bisnis Jagaditha*, 8(2), 202-208.
- [31] Rahbar, E., & Wahid, N. A. (2011). Investigation of green marketing tools' effect on consumers' purchase behavior. *Business Strategy Series*, 12, 2, 73-83.
- [32] Rawat, S.R., Garga, P.K. (2012). Understanding Consumer Behaviour Towards Green Cosmetics.
- [33] Roberts, J. A., & Bacon D. R. (1997). Exploring the subtle relationships between environmental concern and ecologically conscious behavior. *Journal of Business Research*, 10, 1, 79-89.
- [34] Shamdassani, Prem, Gloria Ong Chon-Lin, and Daleen Richmond. (1993). Exploring green consumers in an oriental culture: Role of personal and marketing mix. *Advances in Consumer Research*, 20, 488–93.
- [35] Syahrul, S.A., Mayangsari, L. (2020). A Study of Motives in Choosing Natural Cosmetics Among Indonesian Women. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 5(8), 60-71
- [36] Teng, C.C., and Wang, Y.M. (2015). Decisional factors driving organic food consumption. *British Food Journal*, 117 (3), 1068-1081.
- [37] Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer “attitude-behavioral intention” gap. *Journal of Agricultural and Environmental Ethics*, 19,2, 169-194.
- [38] Wilson, N., Theodorus, E., Tan, P. (2017). Analysis of Factors Influencing Green Purchase Behavior: A Case Study of The Cosmetics Industry in Indonesia. *Jurnal Muara Ilmu Sosial, Humaniora, dan Seni*, 1 (2), 453-64.
- [39] Young, W., Hwang, K., McDonald, S & Oates, C.J . (2010). Sustainable Consumption: Green Consumer Behaviour when Purchasing Products. *Sustainable Development*, 18, 20-31.
- [40] Zang, J., Zhou, M. (2019). Factors Influencing Consumer Purchasing Behavior of Natural Cosmetics - A Qualitative Study in Uppsala, Sweden.